

GEORGIU, P. [Gheorghiu, P.]; DOBRESKU, D. [Dobrescu, D.]

Effect of pantothenic acid and a mixture of globulins and histamine in experimental gastric ulcer. Farm. i toks. 26 no.2:225-227 Mr-Ap '63. (MIRA 17:8)

1. Farmakologicheskaya laboratoriya Bukharestskogo mediko-farmatsevticheskogo instituta (dir. - prof. A. Teytal').

TEITEL, A., MARCU, C.; DOBRESCU, D.; MANUCHIAN, M.

The anti-inflammatory action of phenylbutazone in stress conditions. Fiziol. norm. pat. 6:513-517 '64

1. Catedra de farmacologie, Institutul medico-farmaceutic, Bucuresti.

MARCU, C.; DOBRESCU, D.

Effect on insulin convulsions of phenoxyacid derivatives. Fiziol.  
norm. pat. 6:529-533 '64

1. Catedra de farmacologie, Institutul medico-farmaceutic,  
Bucuresti.

8

L 64570-65

ACCESSION NR: AP5023480

RU/0012/61/000/006/1003/1008

Card 1/2

L 64570-65

ACCESSION NR: AP5023480

Exploratory laparotomy is a necessary approach in many cases

NO. OF PAGES

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EDITION

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OTHER CODES

Card 2/2

MARCU, C.; MANUCHIAN, M.; DOBRESCU, D.; TEITEL, A.; DUMINICA, A.

Contribution to the pharmacodynamic study of pathogenic E. coli endotoxin. Pt.1. Fiziol. norm. pat. 11 no.2:175-181 Mr-Ap '65.

1. Catedra de farmacologie (for Teitel), Catedra de boli contagioase (for Duminica), Institutul medico-farmaceutic, Bucuresti.

DOBRESCU, D., dr.

Trypsin and chymotrypsin. Med. intern. (Bucur.) 17 no.9:1123-1126  
S '65.

1. Lucrare efectuata la Catedra de farmacologie, Institutul  
medico-farmaceutic, Bucuresti.

DOBRESCU, E.; SALAGEAN, I.

On a criterion of compactness for continuous hyperbolic functions. p. 419.

COMUNICARILE. Bucuresti. Vol. 9, no. 5, May 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 9, no. 1, January 1960.

Uncl.

DOBRESCU, E.

Use of mathematics in economic research. Probleme econ 14 no.8:  
98-115 Ag. '61.

(Mathematics) (Economic research)

DOBRESCU, E.

Correlation between the technical progress and the increase of  
social labor productivity. Probleme econ 16 no.6:3-18 Je  
'63.

DOBRESCU, E., candidat in stiinta economice

Aspects of the correlation between the increase of labor productivity and the increase of the level of living standards. Probleme econ 16 no.8:3-11 Ag'63.

DOBRESCU, Edith; IONESCU, T.

Spectral determination of impurities in pure zinc alloys.  
Rev chimie Min petr 14 no.8:465-466 Ag '63.

*Dobrescu, EL.*

ROMANIA

IONESCU, D.; PAUN, A.; DOBRESCU, EL.

Institute of Metallurgical Research - (for all)

Bucharest, Studii si Cercetari de Metalurgie, No 1, 1963,  
pp 75-90.

"Possibilities of Improving the Process of Semi-Carbonization  
in the Fluidized Layer for the Needs of Metallurgical Coke."

(3)

IONESCU, D.; PAUN, A.; DOBRESCU, Elena

Improvement of the low temperature carbonisation process in a fluidized bed. Rev Roum metalurg 8 no. 2:211-227 '63.

Dobrescu, Eugen V. Contribution à une analyse infinitésimale bidimensionnelle. Acad. R. P. Roumaine. Stud. Cerc. Mat. 8 (1957), 103-130. (Romanian. Russian and French summaries)

The author starts from an idea attributed to K. Bögel [J. Reine Angew. Math. 170 (1934), 197-217; 173 (1935), 5-30]: instead of using a neighborhood topology in two dimensions, use the corners of rectangles as the generalization of the endpoints of intervals in one dimension. Thus  $f(x, y)$  is "globally continuous" at  $(x_0, y_0)$  if its second differences starting from  $(x_0, y_0)$  approach zero.

The author defines global boundedness and global semi-continuity analogously and proves a number of theorems involving these concepts. Then he turns to double series:  $\sum \sum a_{mn}$  is globally convergent if for any positive  $\epsilon, p, q$ ,  $|a_{m+p, n+q} - a_{m+p, n} - a_{m, n+q} + a_{m, n}| < \epsilon$  provided  $m \geq M(\epsilon)$ ,  $n \geq N(\epsilon)$ . He gives convergence criteria and examples. [Cf. M. Nicolesco, Bull. Math. Soc. Sci. Math. Phys. R. P. Roumaine (N.S.) 42 (1940), 53-56; MR 7, 13; and the comments made in the review.] Finally the author considers globally convergent series of functions and the relation between global continuity or global semi-continuity of the terms and of the sum.

R. P. Boas, Jr. (Evanston, Ill.)

*B. Ab.*  
DOB R. ESCU, F.

*B1-3, Fuel, Gas, Tar;  
Mineral Oils.*

**Oxidation-resistance of commercial Rumanian spirit and the influence of antioxidants on the peroxide value.** C. Candea, F. Dobrovici, and Z. Gropișanu (*Bull. Inst. Nat. Res. Tr. Rumania*, 1967, 8, No. 4--4, 88--100).—Oxidation of a commercial Rumanian spirit at 100° in the gaseous phase with dry O<sub>2</sub> was carried out in presence of a series of antioxidants. Peroxide and acid value of the oxidized products were determined. Pyrogallol and benzidine inhibit the oxidation completely; 2-nitro- and 2,7-dinitro-fluorene, despite their NO<sub>2</sub> groups, are more effective than more conventional inhibitors. The introduction of the second NO<sub>2</sub>-group results in a 30% improvement in antioxidant properties.  
C. R. PRZ.

DOBRESCU, F.

RUMANIA/Organic Chemistry - Synthetic Organic  
Chemistry.-

G-2

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 25134

Author : Dobrescu, F.

Inst : Rumanian Academy.

Title : On Some Derivatives of 2-Nitro- and 2,7-Dinitro-Fluorene.

Orig Pub : Studii si cercetari stiint. Acad. RFR. Baza Timisoara.  
Ser. stiinte chim., 1956, 3, No 3-4, 45-65Abstract : Fulvenes were synthesized by a known procedure (Candea  
C., Macovschi E., Bull. Soc. chim. France, 1935, (5),  
2, 1703; 1936, (3), 1761), from 2-nitro- (I) and 2,7-di-  
nitro-fluorene (II) and different derivatives of benzal-  
dehyde (III) (1 mole:1 mole). Mixture + several drops  
of piperidine (IV) was heated (1 hour, 155 -160°), pour-  
ed in glacial CH<sub>3</sub>COOH and filtered. From I and - ...

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RUMANIA/Organic Chemistry - Synthetic Organic  
Chemistry.

G-2

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 25134

p-methyl-, p-methoxy-, 3,4-dimethoxy-, 3,4-methylene-  
dioxy- and p-dimethylamino-p-hydroxy-m-methoxy- III  
[sic -- apparently p-dimethylamino-, p-hydroxy-m-metho-  
xy-III, is meant] and III, were obtained, respectively,  
(listing the substance, yield in % (crude), and MP in  
°C): 9-(p-methylbenzal)-(V), 77, 191 (from acetone);  
9-(p-methoxybenzal)-(VI), 64, 170 (from acetone);  
9-(3,4-dimethoxybenzal)-(VII), 71.3, 178 (from acetone);  
9-(3,4-methylenedioxy-benzal)-(VIII), 76.5, 212-213  
(from glacial  $\text{CH}_3\text{COOH}$ ); 9-(p-hydroxy-m-methoxy-benzal)-(\*)  
-, 172 (from alcohol and acetone) and 9-(benzal)-2-nitro-  
fluorene, -, 152. By reduction of V-VIII in alcohol solu-  
tion with Zn and  $\text{CaCl}_2$ , according to known procedure  
(Diels O., Ber., 1907, 34, 1759), were obtained, respec-  
tively, (listing the substance, yield in % MP in °C):  
9-(p-methylbenzal)-(X), 89, 115; 9-(p-methoxybenzal)-

Card 2/4 [(\*) See Card 4/4]

RUMANIA/Organic Chemistry - Synthetic Organic  
Chemistry.

G-2

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 25134

(XI), 93.1, 120 (from alcohol); 9-(3,4-dimethoxybenzal)- (XII), 97, 170 (from aqueous alcohol); 9-(3,4-methylenedioxy-benzal)- (XIII), -, 100 (from aqueous alcohol); 9-(p-dimethylamino-benzal)-2-amino-fluorene (XIV), -, 180 (from alcohol). By treatment of pyridine solutions of X-XIV with  $C_6H_5COCl$  were obtained, respectively, (listing the substance, MP in °C): 9-(p-methylbenzal)-, 100, 216 (from aqueous pyridine); 9-(p-methoxybenzal)-, 175 (from water); 9-(3,4-dimethoxybenzal)-, 220 (from aqueous pyridine); 9-(3,4-methylenedioxy-benzal)-, 160; 9-(p-dimethylamino-benzal)-benzoyl-2-amino-fluorene, 118-120 (from aqueous pyridine). 8 g II, 4.66 g p-dimethylamino-benzaldehyde, 2 ml IV and 30 ml alcohol were heated for 1 hour on water bath and after removal of IV there was obtained 9-(p-dimethylamino-benzal)-2,7-dinitro-fluorene

Card 3/4

RUMANIA/Organic Chemistry - Synthetic Organic  
Chemistry..

G-2

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 25134

(XV), MP 295° (from pyridine and from acetone). By reduction of XV was obtained the 9-(p-dimethylamino-benzal)-2,7-diamino-fluorene, MP 205° (from aqueous alcohol), a pyridine solution of which treated with  $C_6H_5COCl$  yielded 9-(p-dimethylamino-benzal)-dibenzoyl-2,7-diamino-fluorene MP 203° (from aqueous pyridine).

(\*) (IX), 89.2, 185-187 (from acetone), 172-173 (from amyl alcohol) and 178 (from glacial  $CH_3COOH$ ); 9-(p-hydroxy-m-methoxy-benzal)-, ....

Card 4/4

DOBRESCU, Filofteia

Ammonium quaternary salts derived from 2,5-, and 2,7-diaminofluorene.  
Studii cerc chim 8 no.1:157-171 '60. (EEAI 9:8)

1. Laboratorul de procese si aparate al Institutului politehnic,  
Timisoara.

(Quaternary compounds) (Ammonium compounds)  
(Fluorenediamine)

BRATIANU, S.; GAVRILITA, Lorică; ONOPREI, T.; DOBRESCU, Gioconda

Action of colchicine on peritoneal mesothelium of white rats.

Stud cercet med intern 4 no.3:393-396 '63.

(PERITONEUM) (EPITHELIUM) (CELL DIVISION) (COLCHICINE)

TUDORANU, Gh., prof.; POPA, Gh., dr.; DOBRESCU, Gioconda, dr.

Contributions to the study of osteomyelosclerosis. Med. intern. 15  
no.1:31-37 Ja '63.

1. Clinica I medicala, Institutul de medicina, Iasi.  
(MYELOFIBROSIS) (OSTEOSCLEROSIS)

MITROIU, O.; BARBU, C.; CAJAL, N.; DEMETRESCU, R.; IONESCU, T.; POPA, M.;  
in colaborare cu RADULESCU, M.; DOBRESCU, G.; ONITIU, L.

Etiological investigations of epidemic hepatitis. I. The study of  
several viruses cultivated in cell cultures from cases of epidemic  
hepatitis. Stud. cercet. inframicrobiol. 13 no.3:319-327 '62.

1. Comunicare prezentata la Institutul de inframicrobiologie al  
Academiei R.P.R.

(HEPATITIS, INFECTIOUS)  
(VIRUS CULTIVATION)

(HEPATITIS VIRUSES)  
(TISSUE CULTURE)

ROBE: SCU, Ch. M.

Frost-crack: forms, derived and associated defects. Ind  
Jannulus 15 no.12:470-474 D '64.

DOBRESCU, G.H.

SURNAME, Given Names

Country: Rumania

Academic Degrees:

Affiliation: -not given-

Source: Bucharest, Microbiologia, Parazitologia, Epidemiologia, Vol VI,  
No 4, Jul-Aug 1961, pp 331-333.

Data: "Clinical and Laboratory Observations on Certain Cases with an  
Acute Respiratory Syndrome."

Authors:

ATHANASIU, Pierette, -Dr.-

DOBRESCU, Gh., -Dr.-

STRUIOVICI, D., -Dr.-

PETRESCU, Al., -Dr.-

COSTANDACHE, D., -Dr.-

82H 411044 122

RUMANIA

BOTGROS, V., MD; DOBRESCU, Gh. MD

"Professor Dr Victor Babes" Hospital for Contagious Diseases  
(Spitalul de boli contagioase "Prof Dr. Victor Babes") -  
(for all)

Bucharest, Viata Medicala, No 3, 1 Feb 63, pp 197-200

"Meningitis due to Ps. Pyocyanea Cured by Exclusively Topical  
Treatment."

DOBRESCU, Grigore, ing.; MUNTEANU, Aurel, tehnician

Nozzle with changeable bearing disk for sand blast  
cleaning. St si Teh Buc 16 no. 7:38 J1'64.

1. I.M.U., Medgidia.

HURMUZACHE, E., prof.; BAREUTA, R., dr.; TUDORANU, A., dr.; DOBRESCU, G., dr.;  
MANAILA, V., dr.

Contribution to the study of essential hypertension with cerebral  
hemorrhage in children. *Pediatrics* (Bucur) 14 no.1:19-23 Ja-F'65.

1. Lucrare efectuata in Clinica de pediatrie, Iasi.

RUMANIA

616.15:616.2:576.8

ATHANASIU, Pierrette, SARATEANU, D., SURDAN, C., POPESCU, George-  
ta, STEFANESCU, Ileana, BABES, V., BILLER, Sigrid, BRUNITKI, Al.,  
DANIELESCU, Georgeta, BUTOIANU, C., IALOMITEANU, M., RADULESCU, I.,  
COSTANDACHE, D., DOBRESCU, Gh., and NAUM, O., of the Institute of  
Inframicrobiology (Institutul de Inframicrobiologie) of the  
Academy of the Socialist Republic of Rumania (al Academiei  
Republicii Socialiste Romania).

"A Study of the Relations Between the Etiology and Changes in the  
Serum Electrophoregram in Patients with Acute Rickettsial, Para-  
rickettsial, Adenovirotic and Grippal Pneumopathies."

Bucharest, Studii si Cercetari de Inframicrobiologie, Vol 17,  
No 2, 66, pp 93-103.

Abstract: Statistical analysis of laboratory data showed that  
in the acute stages of all the above diseases the albumins are  
lowered and globulins are raised, and the albumin/globulin  
ratio is less than unity. During convalescence the proteinogram  
returns to normal alongside the increase of specific antibodies  
in the case of grippal or adenovirus infections, but in the case  
of rickettsial or pararickettsial ones does so only when the  
specific antibodies are countered by treatment.

Includes 4 Rumanian and one French reference.

1/1

DOBREANU, I.

Pneumatic comparators; description and usage. Metrologia  
apl 10 no.5:198-201 My '63.

ROMANIA/Cultivated Plants. Fruits. Berries.

M

Abs Jour : Ref Zhur-Biol., No 15, 1955, 68383

Author : Neagu, V., Banu, H., Dobrescu, I.

Inst : -

Title : Achieving Normal Grape Yields in the Third  
Year after the Transplanting of Seedlings.

Orig Pub : Gradina, via si livada, 1955, 4, No 5, 59-61

Abstract : No abstract.

Card : 1/1

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DOBRESCU, I.

Insulation of productive layers in wells with gravel and humus.  
p. 7. TEHNICA NOUA. (Asociatia Stiintifica a Inginerilor si  
Tehnicienilor) Bucuresti. Vol. 3, no. 41, Mar. 1956.

SOURCE: East European Accessions List (EEAL), Library  
of Congress, Vol. 5, No. 8, August 1956.

RUMANIA/Cultivated Plants. Fruit Trees. Small Fruit Plants. M

Abs Jour: Ref Zhur-Biol., No 17, 1958, 77801.

Author : Oprean, M.; Popescu, M.; Manolache, E.; Dobrescu, I.  
Inst :  
Title : Rational Utilization of Sands in Krayov Oblast  
by Means of Orchards and Vineyards.

Orig Pub: Gradina, via si livada, 1957, 6, No 4, 22-34.

Abstract: Sands of Krayov Oblast are used for vineyards (12000 ha) and orchards. With high-level agricultural engineering (4 plowings, application of fertilizers: N 50-80 kg, P 30-60 and 50-100 kg K per 1 ha, mechanized cultivation, area of nutrition: 1.2-1.5 m between rows and 0.8-1.1 m in row), 100-130 c/ha of grapes were obtained. Orchards occupy a small section - from 1 to 8-10 ha; the

Card : 1/2

125

RUMANIA/Cultivated Plants. Fruit Trees. Small Fruit Plants.

M

Abs Jour: Ref Zhur-Biol., No 17, 1958, 77801.

majority of the trees are scion-rooted, local varieties. The trees are of average growth strength, bear fruit 30-40 years (harvest of plums, for example, 30-50 kg from 1 tree). -- Ye. T. Zhukovskaya.

Card : 2/2

*DOBRESCU, IOAN*

RUMANIA/Forestry - Forest Cultures.

K-4

Abs Jour : Ref Zhur - Biol., No 20, 1958, 91545

Author : Dobrescu, Ioan

Inst : -

Title : An Extension of Experiments to Increase Seed Germination and Ameliorate the Development of Saplings.

Orig Pub : Rev. padurilor, 1957, 71, No 9, 580-581

Abstract : Problems are discussed invilved in the seed germination and seedling growth by means of chemical treatments in (Rumania). A broad series of tests under production conditions is suggested, covering the treatment of seeds of pine and spruce with hydrochloric acid, seeds of the Siberian larch with a solution of slaked lime, pine seeds with indole acetic acid and seedlings with humus solutions. -- A. Yana

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- 28 -

BALAJ, D.; DRAGOMIR, D.; DOBRESCU, I.; MOTORGA, St.

Observations on the attack of cicadas (*Ceresa bubalus* F.) on the trees in the Danube Delta and suggestions for fighting them.  
Hidrologia 4:429-435 '63.

DOBRESCU, I., ing.

Considerations on the calculus of the gas contaminated mud  
used in cementing. Petrol si gaze 16 no.2:82-88 F '65.

L 10909-66

ACC NR: AP6004492

SOURCE CODE: RU/0007/65/016/002/0082/0088

AUTHOR: Dobrescu, I. (Engineer)

ORG: none

TITLE: Considerations concerning the calculation of gas-contaminated mud used in cementing jobs

SOURCE: Petrol si gaze, v. 16, no. 2, 1965, 82-88

TOPIC TAGS: cement, petroleum engineering, petroleum industry equipment, construction material

ABSTRACT: Analyzing a problem concerning the cementing of oil strings and tubings in oil fields, the author found a correlation between the depth of the well and the volume of gas-contaminated mud to be introduced after the cement, and shows the use of the corresponding method of determining the mud volume in two practical examples. The relation between well temperature and mud volume was also analyzed and the conclusion was reached that at a number of depths the correlation is small. Orig. art. has: 4 figures, 40 formulas, and 4 tables. [JPRS]

SUB CODE: 13, 11 / SUBM DATE: none / ORIG REF: 013 / OTH REF: 007  
SOV REF: 001

OC  
Card 1/1

RUMANIA/Cultivated Plants - Fruits, Berries.

11-3

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39523

Author : Dobrescu, J., Vasile, Gh., Matica, S.

Inst : -

Title : Vineyard with a 98.3% rate of Acclimatization in Dobrudzha Steppe (NR).

Orig Pub : Gradina, via si livada, 1957, 6, No 5, 45-50

Abstract : A 98.3% assimilation was obtained at a vineyard covering an area of 52.35 ha in the village of Ostrov (Konstantza Province). The following varieties were planted in that area in 1956: white Petyaska, Chasselas doré, Italian Riesling, Riparia Gloire rootstock. The Afuz-Ali variety was grown on a rootstock Riparia Gloire on an area of 1 ha and the acclimatization was 100%. The planting and the care of the vineyards were conducted on a high agricultural level (triple hill, dusting with hexachlorocyclohexane,

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RUMANIA/Cultivated Plants, Fruits, Berries.

M-8

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39523

fourfold weeding and hollowing to a depth of 7-10 cm).  
Wood of Fetyaska white and Italian Riesling varieties  
ripened best. -- Ye.T. Lukovskaya

Card 2/2

DOERESCU, Paul, ing.

Pilgrim-step-conveyer of the Turning Lathe Plant, Arad. Constr  
mas 15 no.5:360-366 My '63.

1. Institutul Tekhnologic pentru Constructii de Masini si  
Electrotehnica.

DOBRESCU, L.

The use of nuclear energy in the treatment of ores.

p. 4  
Vol. 7, no. 1, Jan. 1956  
REVISTA MINELOR  
Bucuresti

SO: Monthly List of East European Accessions (EEAL), LC, Vol. 5, no. 12  
December 1956

DOBRESCU, L.

"A thermodynamic study of actions of the reagents in the flotation of ores."

p. 171 (Studii Si Cercetari De Metalurgie) Vol. 2, no. 1/2, 1957  
Bucharest, Rumania

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,  
April 1958

DOBRESCU, I.

Materials used in nuclear reactors.

p. 168 (Energetica) Vol. 5, no. 4/5, Apr./May 1957, Bucuresti, Rumania

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

DOBRESCU, L.

Contribution to the theory of the concentration of useful mineral substances by settling method, p. 517.

Academia Republicii Populare Romine. Centrul de Cercetari Metalurgice. STUDII SI CERCETARI DE METALURGIE. Bucuresti, Rumania. Vol. 3, no. 4, 1958.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, no. 8, Aug. 1959

Uncl.

Distr: 4E2c

2  
1

Dressing of minerals of rare metals. Luigi Dobrescu.  
*Rev. minier* (Bucharest) 9, 200-16(1938). The flotation  
 and other treatments of minerals abundant in Fe, Si, Al,  
 Ca, Na, K, Mg, Ti, and Mn, in which the rare metal is Zn,  
 Ni, Cu, Sn, Co, Pb, As, Sb, Hg, Bi, Cd, Ag, Sc, Au, Te,  
 Rb, Sr, Ba, Zr, Cr, V, W, Li, Ga, Mo, Th, rare earth  
 metals, U, B, Ta, Ti, In, Pd, Pt, Rh, Re, Ir, Os, Ru, and  
 (or) Ra are described. For example, if U is to be recov-  
 ered from minerals contg. ~ 0.2-0.5%  $U_3O_8$ , an enrichment  
 of 50% is easily possible by flotation with oleic acid and alkali  
 soaps as collector, with pine oil or phenols or higher alcs. as  
 foaming agents, and under use of certain addns., such as  
 $Na_2SiO_3$ ,  $SP_3$ , or  $H_2SO_4$ , for the suppression of the gang.  
 Werner Jacoby

DOBRESCU, L., conf.; DIMA, S., ing., candidat in stiinta tehnice

Possibilities of utilizing the serpentines of Southern Banat  
by mechanical dressing. Rev min 12 no.7:304-311 JI '61.

DOBRESCU, Luigi

Some applications of the statistical calculation of flotation.  
Studii cerc metalurgie 9 no.2,335-351 '64.

GRACIUN, E.C.; VELCIU, P.H.; DOBRESCU, M.

The duodenal crossover and its clinical and pathomorphological aspect. Stud. cercet. med. intern. 5 no.2:159-166 '64.

DOBRESCU, Nicolae, ing.

The simplest voltmeter with transistors. St. ul. Teh. Buc. 17 no.2:  
21 F '65.

S/058/62/000/010/081/093  
A061/A101

AUTHOR: Dobrescu, N. Andrei

TITLE: The propagation of electromagnetic waves in curved waveguides

PERIODICAL: Referativnyy zhurnal, Fizika, no. 10, 1962, 18, abstract 10Zhl25  
("An. Univ. 'C. I. Parhon', Ser. științ. natur.", 1961, v. 10, no.  
30, 57 - 65, Rumanian; summaries in Russian and German)

TEXT: The propagation of TFM waves in curved waveguides is examined. The  
problem of TM wave propagation is also discussed. ✓

[Abstracter's note: Complete translation]

Card 1/1

S/274/63/000/002/006/019  
A055/A126

AUTHOR: Dobrescu, N. Andrei

TITLE: Propagation of electromagnetic waves in curved waveguides

PERIODICAL: Referativnyy zhurnal, Radiotekhnika i Elektrosvyaz', no. 2, 1963, 41, abstract 2A250 (An. Univ. "C.I. Parhon". Ser. ştiinţ. natur.", 1961, v. 10, no. 30, 57 - 65; Rumanian; summaries in Russian and German)

TEXT: The possibility of the propagation of transverse magnetic waves in curved waveguides is examined. An equation with partial derivatives of the scalar potential is obtained from Maxwell equations. It is shown that, in the case of a waveguide with ideal conductance, the propagation of electromagnetic waves in such a waveguide satisfies the "Neyman-Dierichle" (Neyman-Dirikhle) conditions for equations with partial derivatives of the scalar potential. There are 2 references.

V.S.

[Abstracter's note: Complete translation]

Card 1/1

DOBRESCU, P.

Testing (Examining) of Special plugs by means of calibrated wire.  
METALURGIA SI CONSTRUCTIA DE MASINI (Metallurgy and Machine Construction.)  
1:40:Jan 55

Dobrescu, P.

DORRESCU, P.

DORRESCU, P. Some thermodynamic calculations for lathe tools. p. 28.

Vol. 8, no. 2, Feb. 1956.

METALURGIA SI CONSTRUCTIA DE MASINI.

TECHNOLOGY

RUMANIA

So: East European Accession, Vol. 6, No. 5, May 1957

APOSTOLESCU, S.; CONSTANTINESCU, M.; DOBRESCU, S.; IVANCEANU, I.;  
MATEICIUC, V.

Neutron total effective section of arsenic in the field of  
0,05-40 eV energies. Studii cerc fiz 15 no. 2:155-160  
'64.

1. Institute of Atomic Physics, Bucharest.

DOBRESCU-PURICE, L.

Geometrization of the phenomena of wave propagation, described by the equations with partial derivatives of the second order in the space of time. In Russian. p. 413.

REVUE DE MATHEMATIQUES PURES ET APPLIQUEES. JOURNAL OF PURE AND APPLIED MATHEMATICS. (Academia Republicii Populare Romine) Bucuresti, Rumania. Vol. 3, no. 3, 1958.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 7, July 1959.

Uncl.

S/O44/62/000/006/025/127  
B158/B112

AUTHOR: Dobrescu-Purice, L.

TITLE: Geometrization of the wave propagation effect, described by a partial differential equation of the second order, and of the Huygens principle

PERIODICAL: Referativnyy zhurnal. Matematika, no. 6, 1962, 68, abstract 6B290 (Bul. Inst. petrol, gaze și geol., v. 6, 1960, 447 - 453)

TEXT: Continuing the investigations started in one of his previous papers (RZhMat, 1960, 3029) and based on a generalization of Teodorescu's invariant theory of wave propagation (RZhMat, 1956, 1363), the author, regarding the wave as a set of contact elements in the Lie sense and relying on wave propagation equations given in his above-mentioned work, arrives at a compilation of the principles of epicentric waves and of bending Huygens waves. The article concludes with an indication of the criteria defining possible modes of wave propagation in the Huygens sense on manifolds  $S_{n-1}$  in the space under consideration. [Abstracter's note: Com-  
Card 1/2

Geometrization of the wave ...

S/044/62/000/006/025/127.  
B158/B112

plete translation.]

Card 2/2

RUMANIA

BENES, S., Lieutenant-Colonel, Medical Corps; MIHAESCU-NIGRIM, Maria;  
DOBRESCU, V., and CIOBANESCU, Mariana

"Formation of Antibodies in Rats Receiving Injections of Vitamin K3 and Exposed to X-Irradiation"

Bucharest, Revista Sanitara Militara, Vol 16, Special No., 1965; pp 474-481

Abstract: Preliminary study on rats administered unstated dose of vitamin K3 15 minutes before irradiation with 250 r showed that mortality was 55% in comparison with 19% in irradiated rats not having received the vitamin. However, in a later more comprehensive study results on the effect of K3 on mortality and immunogenicity in irradiated rats were relatively uncertain despite statistical treatment. 4 tables, graph.

1/1

- 87 -

RUMANIA

MIHAESCU-NIGRIM, Maria, BENES, S., Lieutenant-Colonel, Medical Corps;  
ANDREUTA, Irina; DOBRESCU, V.; and CIOBANESCU, Mariana

"Experimental Infections in Rats Receiving Injections of Vitamin K3 and  
Exposed to X-Irradiation"

Bucharest, Revista Sanitara Militara, Vol 16, Special No., 1965; pp 490-491

Abstract: In rats administered 100 mg/Kg of Vitamin K3, irradiated with  
250 r, and inoculated with Salmonella typhi. Mortality seemed about the  
same in all groups, i.e., vitamin K3 did not increase either susceptibil-  
ity to mortality from radiation or to virulence of the Salmonella.

1/1

~~VANYUKOV~~ DOBRETsov, A.F.  
VANYUKOV, M.P., kand.fiz.-mat.nauk; DOBRETsov, A.F., inzh.; ISAYENKO, V.I.,  
inzh.; MAK, A.A., inzh.

Sectional high-pressure spark discharge lamp. Svetotekhnika 4  
no.4:9-11 Ap '58. (MIRA 11:4)

1.Gosudarstvennyy opticheskiy institut.  
(Electric lamps)

VANYUKOV, M.P.; DOBRETSOV, A.F.; ISAYENKO, V.I.; MAK, A.A.

Powerful pulse light source. Usp.nauch.fot. 6:53-57 '59.

(MIRA 13:6)

(Electric discharge lighting)  
(Photography, Flashlight)

Country : USSR  
Category : Weeds and Weed Control N  
Abstr. Jour. : RZhBiol., No. 14, 1958, No. 63635  
Author : Dobretsov, A.N.  
Institut. : Not given  
Title : Herbicide 2,4-D Destroys Wild Hemp (*Cannabis ruderalis*)  
Orig. Pub. : Zashchita rast. ot vredit. i bolezney, 1957, No. 1, 36  
Abstract : According to a production test made in 1955 at the Kanskiy Grain Sovkhoz in Krasnoyarskiy Kray, the chemical weeding of wild hemp and other weeds by spraying 2,4-D from an airplane boosted the spring wheat grain yield to 28.8 centners per hectare against 11.8 gotten without spraying, while cutting costs to 1/5-1/6 compared with hand weeding. --N.N. Sokolov  
Card: 1/1

1 DOBRETSOV, A. N.

USSR/Weeds and Weed Control.

N

Abs Jour : Ref Zhur Biol., No 18, 1958, 82612

Author : Dobretsov, A.

Inst : Krasnoyarsk Scientific Research Institute of Agriculture

Title : On the Application of 2,4-D Herbicide Against Wild Hemp

Orig Pub : Byul. nauchno-tekhn. inform. Krasnoyarskogo n.-1. in-ta  
s. kh., 1957, No 1-2, 84-86

Abstract : At Kanskiy Grain Sovkhoz, aerial treatment of plantings was conducted in 1954-1956 at the sprouting stage of grain crops and not later than the beginning of shoot emergence in the plants, with the sodium 2,4-D herbicide in a dosage of 0.8-1.0 kilograms/ha. of active substance (in 100 liters of water). One half of the plants of the wild hemp perished and the surviving injured plants remain underdeveloped. The weight of the green bulk of

Card 1/2

- 2 -

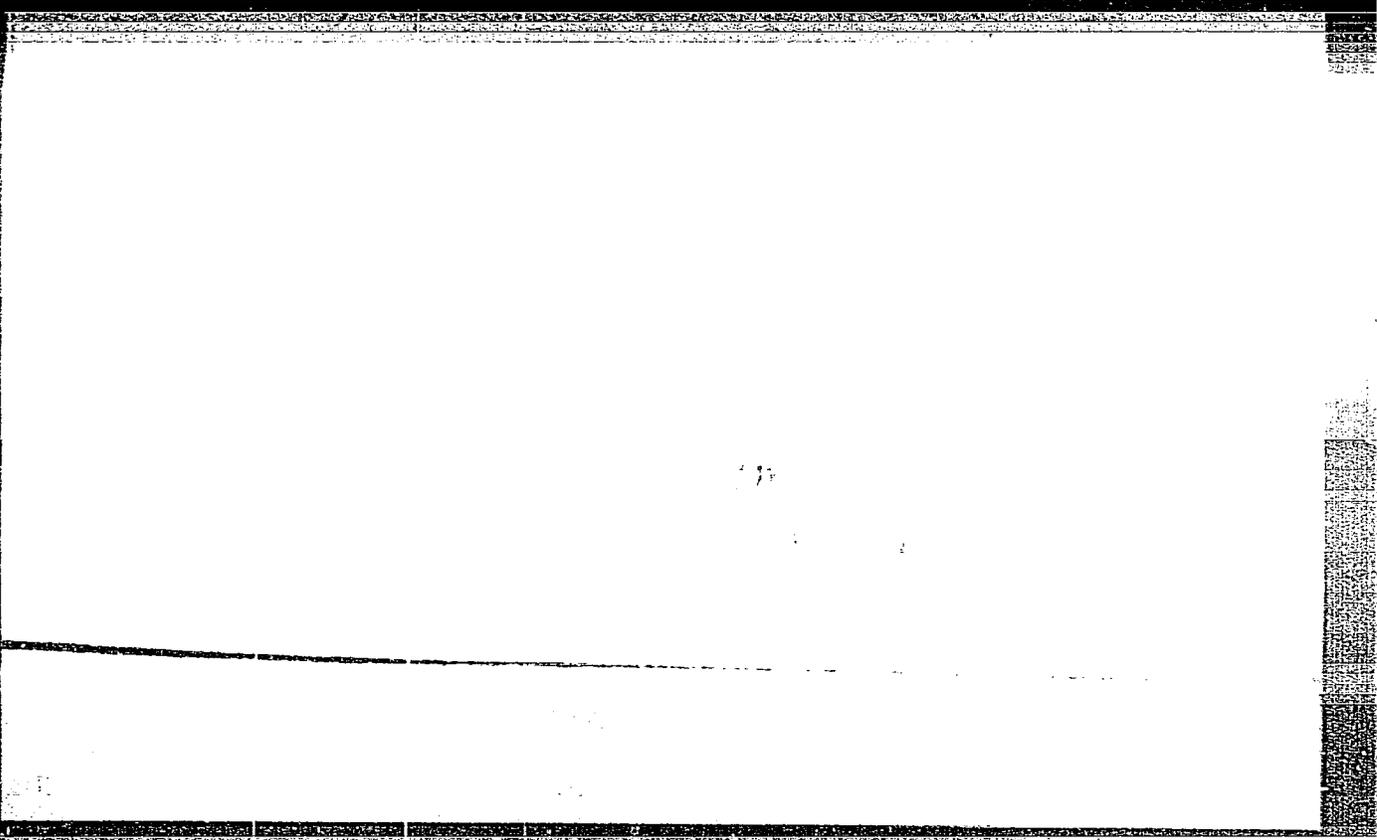
USSR/Weeds and Weed Control.

N

Abs Jour : Ref Zhur Biol., No 18, 1958, 82612

the weeds decreases to one fourteenth in comparison with the control. Also affected are dullseed coarbind, the thistle, the saltbush, common amaranth and a number of weeds from mustard family. The crop of spring wheat increased by 2.4 times. -- L.D. Stonov

Card 2/2



MEKLER, L.B.; DOBRETSOV, G.Ye.; ZHKANOV, V.M.

Cytochemical and immunocchemical analysis on the level of electron  
microscopy; general approach to the problem. Vop. virus. 9 no.3:  
271-275 My-Je '64. (MIRA 18:1)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.

MEKLER, L.B.; DOBRETSOV, G.Ye.

Heterogeneity of the complex actinomycin D - DNA of the bacteriophage  
T<sub>7</sub>. *Biophysika* 10 no.5:880-882. '65.

(MIRA 18:10)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR.

SOV/123-59-15-59457

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 15, p 84 (USSR)

AUTHOR: Dobretsov, I.F.

TITLE: A Die for the Straightening of Shells

PERIODICAL: Radiotekhn. proiz-vo, 1957, Nr 8, p 53

ABSTRACT: A die is described for the straightening of shells, warranting a secure fixing of the blank all over its length and an automatic removal of the piece from the punch.

K.S.M.

Card 1/1

18(5)

AUTHOR:

Dobretsov, I.F.

SOV/128-59-6-22/25

TITLE:

Universal Metallic Mold for Semi-Flanges

PERIODICAL:

Liteynoye Proizvodstvo, 1959, Nr 6, p 44 (USSR)

ABSTRACT:

The metal die shown in the diagram is used for casting semi-flanges of various length (from about 135 mm up to 338 mm). All components of the die, except for the center part, are permanent. The introduction of the metallic mold casting method increased production considerably, compared to the formerly employed method of sand mold casting. There are 2 diagrams

Card 1/1

DOBRETsov, I.F.

Automatic turret press for stamping silver-tipped contacts.  
Priborostroenie no.5:17-18 My '62. (MIRA 15:5)  
(Forging machinery)

MEKLER, L. B.; DOBRETISOV, Kh. Ye.; ZHDANOV, V. M.

"The chemical analysis in electron microscopy."

report submitted for 3rd European Regional Conf, Electron Microscopy, Prague,  
26 Aug-3 Sep 64.

DOBRETSOV, L. N.

PROCESSES AND PROPERTIES INDEX

ca

3

Ionization of atoms of alkali metals on the surface of tungsten, molybdenum and thoriated tungsten. L. N. Dobretsov. *J. Exptl. Theoret. Phys. (U. S. S. R.)* 4, 763-66(1934).—The variation of ionization  $\alpha$  with temp. for Na vapors on W and Mo follows the Langmuir-Saha law. For Na the reaction chamber was heated to 331-00°, for K to 221-40°. On Th-coated W,  $\alpha$  varies with temp. as for pure W unless  $\theta$  is greater than 0.6. For K,  $\alpha$  also varies very little with  $\theta$ . Ionization takes place on Th free spots. F. H. Rathmann

ASB-324 METALLURGICAL LITERATURE CLASSIFICATION



PROCESSES AND PROPERTIES - 5114

3

**Influence of electric field on surface ionization.** I. N. Dohmetova. *Physik. Z. Sowjetunion* 11, 047-50 (1937).

The influence has been studied of the elec. field on the degree of ionization at different temps. on a W surface, on which surface ionization of K and Na was taking place. The results obtained have been compared with the theory developed by Morgulis. The difficulty of applying this theory to the explanation of the results has been illustrated. The possibility of interpreting the field influence on the degree of ionization has been ascertained as the Schottky effect on the ions. The field influence on the const. coeff. in the Langmuir-Saha formula has been established.

Harold Gershinowitz

ASD-514 METALLURGICAL LITERATURE CLASSIFICATION

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z AA AB AC AD AE AF AG AH AI AJ AK AL AM AN AO AP AQ AR AS AT AU AV AW AX AY AZ BA BB BC BD BE BF BG BH BI BJ BK BL BM BN BO BP BQ BR BS BT BU BV BW BX BY BZ CA CB CC CD CE CF CG CH CI CJ CK CL CM CN CO CP CQ CR CS CT CU CV CW CX CY CZ DA DB DC DD DE DF DG DH DI DJ DK DL DM DN DO DP DQ DR DS DT DU DV DW DX DY DZ EA EB EC ED EE EF EG EH EI EJ EK EL EM EN EO EP EQ ER ES ET EU EV EW EX EY EZ FA FB FC FD FE FF FG FH FI FJ FK FL FM FN FO FP FQ FR FS FT FU FV FW FX FY FZ GA GB GC GD GE GF GG GH GI GJ GK GL GM GN GO GP GQ GR GS GT GU GV GW GX GY GZ HA HB HC HD HE HF HG HH HI HJ HK HL HM HN HO HP HQ HR HS HT HU HV HW HX HY HZ IA IB IC ID IE IF IG IH II IJ IK IL IM IN IO IP IQ IR IS IT IU IV IW IX IY IZ JA JB JC JD JE JF JG JH JI JJ JK JL JM JN JO JP JQ JR JS JT JU JV JW JX JY JZ KA KB KC KD KE KF KG KH KI KJ KL KM KN KO KP KQ KR KS KT KU KV KW KX KY KZ LA LB LC LD LE LF LG LH LI LJ LK LL LM LN LO LP LQ LR LS LT LU LV LW LX LY LZ MA MB MC MD ME MF MG MH MI MJ MK ML MN MO MP MQ MR MS MT MU MV MW MX MY MZ NA NB NC ND NE NF NG NH NI NJ NK NL NO NP NQ NR NS NT NU NV NW NX NY NZ OA OB OC OD OE OF OG OH OI OJ OK OL OM ON OP OQ OR OS OT OU OV OW OX OY OZ PA PB PC PD PE PF PG PH PI PJ PK PL PM PN PO PP PQ PR PS PT PU PV PW PX PY PZ QA QB QC QD QE QF QG QH QI QJ QK QL QM QN QO QP QQ QR QS QT QU QV QW QX QY QZ RA RB RC RD RE RF RG RH RI RJ RK RL RM RN RO RP RQ RR RS RT RU RV RW RX RY RZ SA SB SC SD SE SF SG SH SI SJ SK SL SM SN SO SP SQ SR SS ST SU SV SW SX SY SZ TA TB TC TD TE TF TG TH TI TJ TK TL TM TN TO TP TQ TR TS TT TU TV TW TX TY TZ UA UB UC UD UE UF UG UH UI UJ UK UL UM UN UO UP UQ UR US UT UY UZ VA VB VC VD VE VF VG VH VI VJ VK VL VM VN VO VP VQ VR VS VT VY VZ WA WB WC WD WE WF WG WH WI WJ WK WL WM WN WO WP WQ WR WS WT WY WZ XA XB XC XD XE XF XG XH XI XJ XK XL XM XN XO XP XQ XR XS XT XU XV XW XX XY XZ YA YB YC YD YE YF YG YH YI YJ YK YL YM YN YO YP YQ YR YS YT YU YV YW YX YY YZ ZA ZB ZC ZD ZE ZF ZG ZH ZI ZJ ZK ZL ZM ZN ZO ZP ZQ ZR ZS ZT ZU ZV ZW ZX ZY ZZ

100 AND 4TH COLUMNS  
111 AND 110 COLUMNS  
PROCESSES AND PROPERTIES INDEX

3

CA

Measurement of the heat of evaporation of electrons from a thoriated tungsten surface in an electric field. L. N. Dobretsov. *J. Exptl. Theoret. Phys.* (U. S. S. R.) 11, 603-14(1941).—Measurements were made in the region of the anomalous Schottky effect. Within the limits of error of the measurements, the results support the hypothesis that the anomalous Schottky effect is due to a change of the latent heat of evapn. produced by the elec. field. R. H. Rathmann

State Univ, Alsea - Ota

ASM-AIA METALLURGICAL LITERATURE CLASSIFICATION

GROUP	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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Apr 1947

USSR/Physics  
Electrons - Emission  
Tungsten

"Electron and Ion Emission of Thoriated Tungsten in Sodium Vapors," L. N. Dobretsov, 13 pp

"Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki" Vol XVII, No 4, pp 301-313.

The electron emission and surface ionization of a thoriated tungsten filament in an atmosphere of sodium vapor is investigated over a wide range of vapor densities for several degrees of activation, at different filament temperatures and different electric fields at the filament surface. In evaluating

34780

ID

Apr 1947

USSR/Physics (Contd)

the results obtained, besides the well-known data on the properties of thoriated tungsten, it is necessary to assume that the work function of tungsten surface increases when sodium is absorbed in it.

34780

ID

DOBRETSOV, L. N.

DOBRETZOV, L. N.

SA

W

537 583

2388

Surface ionization of thin layers of calcium and magnesium oxides. DOBRETZOV, L. N., STARODUBTSEV, S. V. AND TIMOKHINA, I. I. *C. R. Acad. Sci. URSS*, 55 (No. 4) 303-6 (1947).—It is known that layers of some elements, such as Ca and Mg, on a W filament do not give positive ion currents in agreement with the Langmuir-Saha formula. By depositing a layer of either MgO or CaO on the W before depositing the element itself, it was shown that the positive ion emission decreased with increasing thickness of the oxide, and that it was immaterial whether the Mg and Ca were deposited on their own oxide or on the oxide of the other. Cd, Bi and Pb deposited over either MgO or CaO gave very little emission even at high temps., whereas, according to the Langmuir-Saha relation, Pb should give a greater emission than Mg.

W. E. D.

A5-33  
W

Jun 48

USSR/Metals  
Electron Theory

"The Significance of "Discharge Work" [sic] in Metals," L. N. Dobretsov, Leningrad Phys Tech Inst, Acad Sci USSR, 25 3/4 pp

pp 727-752.

"Zhur Tehn Fiz" Vol XVIII, No 6, pp 727-752.  
Concept of "discharge work" [sic], as a measure of combining energy of electrons in a solid, arose at an early stage in development of electronic theory of metals. When an electron is removed from a metal, work done is expressed by the formula  $\chi = \int_{-b}^{\infty} f(\chi) d\chi$ .

10/49792

Jun 48

USSR/Metals (Contd)

Units may be ergs, eV, cal/gm mol or volts.

Describes five methods for measuring  $\chi$ .  
Discusses nature of phenomenon and explains effect of electric field and adsorbed atoms, including case of "spotted cathode". Submitted 1 Mar 48.

10/49792

DOBRETSOV, L. N.

RA 10/49792

DOBRETSOV, L. N.

Electronic and ionic emission. Moskva, GAs. izd. tekhn.-teoret. lit-ry, 1950. 275 p.

DOBERTSOV, L.N.

On the Schottky correlation. Trudy VTI AN Uz SSR 3:39-44 '50.  
(Thermionic emission) (MIRA 11:4)

КОПЕРСОВ, Л. Н.

Elektronnaya i ionnaya emissiya (Electron And Ion Emission) Moskva  
Gos. izd-vo Tekhniko-Teoreticheskoy Literatury, 1952.

311 p. diags.

"Literatura": p. 305-311.

N/5  
613.645  
.D6

DOBRET<sup>5</sup>OV, L.N.

USSR/Physics - Ions, Neutralization

Jun 52

"Neutralization of Ions Of Potassium and Sodium on Tungsten and Tantalum," L. N. Dobretsov, V. N. Lepeshinskaya, I. E. Bronshteyn

"Zhur Tekh Fiz" Vol XXII, No 6, pp 961-967

Present formulas showing relation of ions leaving the surface of a metal to volatile atoms in the case of particles moving with thermal velocities. Describes construction of equipment and method of measurements. For higher velocities of particles formulas by L. N. Dobretsov (cf. "Electron and Ion Emission," 1950) are applied. Received 1 Feb 52.  
219T85

USSR/Physics - Spark Machining 1 Aug 52

"Determining the Coefficients of Cathode Atomization of Metals by Ions of the Same Metals," L. N. Dobretsov, N. M. Karnaukhova

"Dok Ak Nauk SSSR" Vol 85, No 4, pp 745-748

States that phenomenon of cathode atomization can be divided into 2 stages: (1) elemental act of interaction of ion with the lattice of the target (excitation of the lattice of succeeding processes leading to rupture of the atoms of the substance from the lattice (primary cathode atomization). Purpose of the current work, the author states, was to obtain exptl data on cathode atomization of certain metals by ions of the same metals. Finds dependence of subject coeff upon energy of the ions. Submitted by Acad P.I. Lukirskiy 3 Jun 52,

227775

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DIDRETSOV, L.N.

**"APPROVED FOR RELEASE: 06/12/2000**

**CIA-RDP86-00513R000410610012-6**

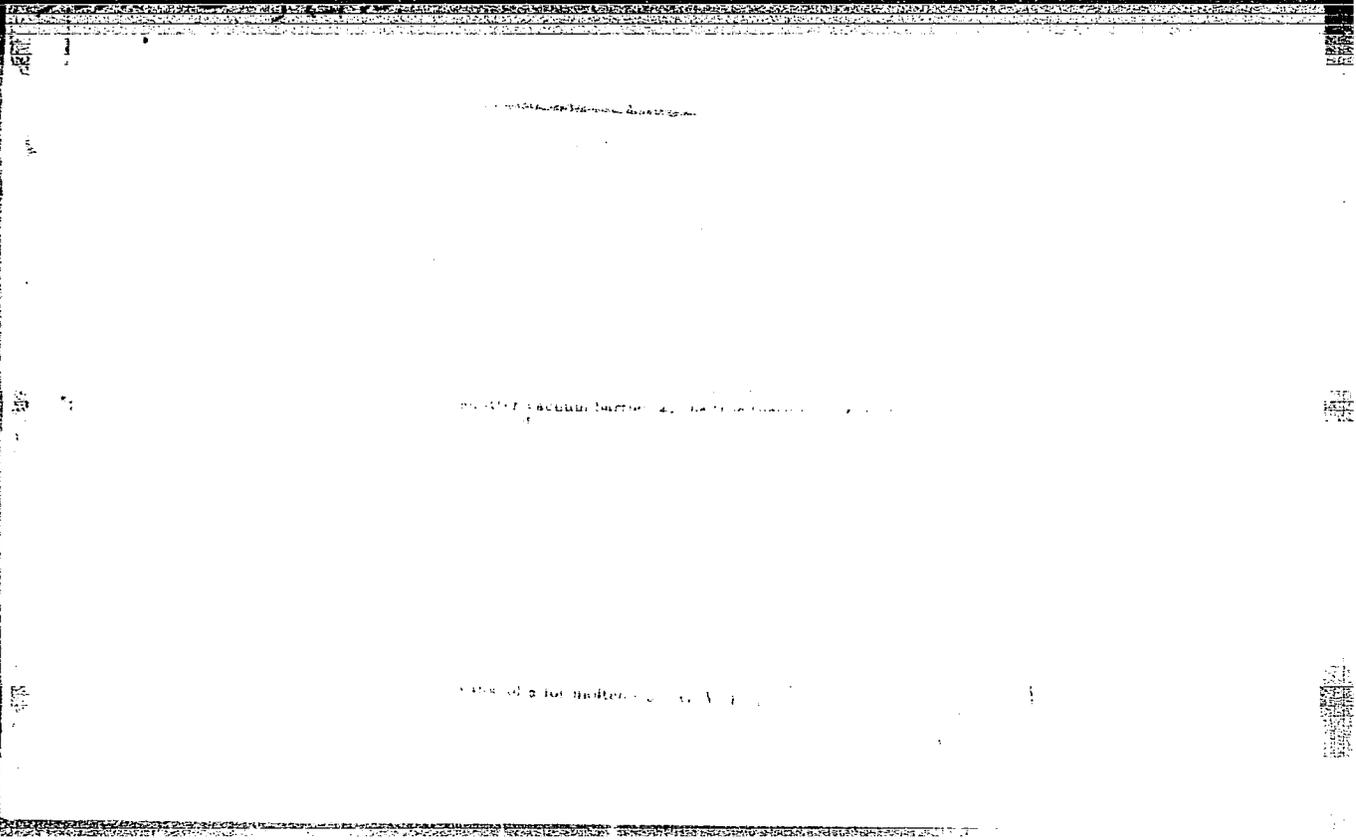
**APPROVED FOR RELEASE: 06/12/2000**

**CIA-RDP86-00513R000410610012-6"**



IOFFE, A.F.; LEBEDEV, A.A.; FOK, V.A.; STARIK, I.Ye.; KONSTANTINOV, B.P.;  
DZHELEPOV, B.S.; PERFILOV, N.A.; DOBRETSOV, L.N.; STARODUBTSEV, A.V.;  
NEMILOV, Yu.A.; ZHDANOV, A.P.; MURIN, A.N.; DOBRETSEV, K.K.; TSARE-  
VA, T.V.; SHUL'MAN, A.R.; YEREMEYEV, M.A.

P.I. Lukirskii; obituary. Vest. AN SSSR 24 no.12:62 D '54. (MIRA 8:1)  
(Lukirskii, Petr Ivanovich, 1894-1954)



USSR/ Physics - Secondary electron emissions

Card 1/1 Pub. 22 - 8/50

Authors : Dobretsov, L. N., and Titkov, A. S.

Title : The secondary electron emission from a ridge of a monocrystal NaCl

Periodical : DOK. AN SSR 100/1, 33-36, Jan. 1, 1955

Abstract : Experiments intended to establish certain characteristics (coefficient, thermal effect) of the secondary electron emission from ridges of monocrystals of NaCl, are described. The method of singular pulses was used in the experiments; natural crystals of table salt from the Artemovsk regions (origin) were used as the targets of the emission. Five references; 4 USSR and 1 USA (1939-1953). (1952). Graphs; table.

Institution : Acad. of Scs., USSR, Leningrad Physico-Technical Institute

Presented by: Academician P. I. Lukirskiy, September 13, 1954

DOBRETSOV, L. N.

"Secondary Electron Emission (State and Prospects)," by L. N. Dobretsov, Leningrad Physicotechnical Institute, Academy of Sciences USSR, Izvestiya Akademii Nauk, Seriya Fizicheskaya, Vol 20, No 9, Sep 56, pp 994-1007 ✓

A review of progress of secondary emission starting with the 1930s and extending into the present is presented by the writer; the subject is divided into three subdivisions: the excitation of the emitter's electrons by the action of the primary electrons, the motion of the electrons from the excited point to the surface, and the escape of the electron from the body. This study is done by separately analyzing each term of the equation expressing the coefficient of secondary emission  $\sigma$

$$\sigma = \int_0^x w(x) W(x) P(\ell, E_0) d\ell$$

where  $P(\ell, E_0) d\ell$  is the number of electrons excited on the section of path  $d\ell$  traversed by the primary electron on a distance  $\ell$  from the origin where its energy was  $E_0$ .  $W(x)$  is the probability that the electron from a depth  $x$  will reach the surface; and  $w(x)$  is the probability of the electron escaping outside the solid body. A number of Soviet and Western theoretical works are devoted to the clarification of these functions.

Sum 1258

9 (3)

SOV/112-57-5-10959

Translation from: Referativnyy zhurnal. Elektrotehnika, 1957, Nr 5,  
pp 201-202 (USSR)

AUTHOR: Bliskunov, N. A., Dobretsov, L. N., Parkhomenko, V. S.,  
Saykina, M. F., Chistyakova, M. A.

TITLE: Cathodes With an Activator in the Oxide Layer (A Preliminary Report)  
(Katody s aktivatorom v oksidnom sloye. Predvarit. soobshch.)

PERIODICAL: Tr. n.-i. in-ta, M-vo radiotekhn. prom-sti SSSR, 1956,  
Nr 1 (29), pp 48-50

ABSTRACT: Experiments with introducing the Si activator into a cathode oxide coating are described; this permits using a pure Ni base. A possibility has been verified of depositing alkali-earth metal carbonates in the presence of suspended Si granules that act as seeds for crystallization and that are uniformly distributed over the entire deposit; this fact favors the BaO reduction conditions in the cathode. The Si contents can be controlled by the size of

Card 1/2

SOV/112-57-5-10959

Cathodes With an Activator in the Oxide Layer (A Preliminary Report)

granules and can be brought to 0.3% (by weight). The tests have been conducted with 22 diodes having pure Ni cathodes coated with carbonates containing 0.06% Si (by weight). It has been much easier to activate these cathodes than those without Si; the activation is better than in the case of a filament with added Si and coated with pure carbonates. Emission characteristics of the cathodes tested for 250 hours approximate those of the cathodes with Ni base with added Ca and coated with ordinary carbonates. Temperature measurements on the experimental cathodes have shown that the radiant emissivity of Si-containing oxides is slightly higher than that of pure oxides.

Ye.S.S.

Card 2/2

*DOBRETSOV, L. N.*

H

USSR - Electronics

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 9757

Author : Bulyginskiy, D.G., Dobretsov, L.N.

Inst : Not given

Title : Concerning the Electron Temperature in Oxide Cathodes.

Orig Pub : Zh. tekhn. fiziki, 1956, 26, No 5, 977-984

Abstract : The measured value of the temperature of the electron gas depends on the ohmic voltage drop across the oxide layer and on the electron-optical action of the grid placed between the electron collector. A procedure is developed which permits eliminating the errors resulting in this case. The dependence of the electron temperature on the temperature of the cathode core was measured for the case of oxide cathodes with different composition of the impurities in the core and in the coating, and also for different states of activation. The electron temperature always exceeds the temperature of the

Card : 1/2

USSR / Electronics

H

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 9757

Abstract : cathode core. The difference between these temperatures increases with increasing cathode temperature. These results, in the author's opinion, are evidence that the electron gas in the cathode is "overheated".  
Bibliography, 15 titles.

Card : 2/2

*DOBRETsov, L. N.*

H

USSR / Electronics

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 9756

Author : Bulyginskiy, D.G., Dobretsov, L.N.

Inst : Not given

Title : Investigation of the Distribution of the Work Function on the Surface of an Oxide Cathode

Orig Pub : Zh. tekhn. fiziki, 1956, 26, No 6, 1141-1149

Abstract : The value of the work function changes from point to point on the surface of an oxide cathode. This property can be described by means of a distribution function  $\beta(\varphi) d\varphi$  which equals the fraction of the cathode surface that has a work function in the interval between  $\varphi$  and  $\varphi + d\varphi$ . A method is developed for the determination of the function  $\beta(\varphi)$ . The method is based on the assumption that the deviation of the delay curve in semi-logarithmic scale from a straight line in the transition region to the saturation

Card : 1/2

U  
USSR / Electronics

H

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 9756

Abstract : current is due to a gradual saturation of emission current from the portions of the cathode that have different work functions. The causes that can lead to the distortion of delay curve are analyzed. The function  $\beta(\varphi)$  is determined for the case of an oxide cathode on a core made of siliceous nickel. Curves of  $\beta(\varphi)$  are obtained for different states of activations and cathode temperatures. Each of the local work functions has a positive temperature coefficient which increases with the work function, in agreement with the ideas concerning the oxide cathode as a donor semiconductor.

Card : 2/2

DOBRETSOV, Leontiy Nikolayevich, redaktor; ZABRODINA, A.A., tekhnicheskiy  
~~redaktor~~

[The oxide cathode. A collection of translated articles] Oksidnyi  
katod. Sbornik perevodov statei pod red. L.N.Dobretsova. Moskva,  
Gos.energ.izd-vo, 1957. 190 p. (MLRA 10:10)  
(Cathodes)

AUTHOR: DOBRETSOV, L.N., MATSKEVICH, T.L. PA - 2800  
TITLE: Effect of Reflected Electrons in Second Electronic Emission.  
(Rol'otrazhennykh elektronov vo vtorichnoy elektronnoy emissii,  
Russian).  
PERIODICAL: Zhurnal Tekhn. Fiz., 1957, Vol 27, Nr 4, pp 734 - 744 (U.S.S.R.)  
Received: 5 / 1957 Reviewed: 6 / 1957  
ABSTRACT: In this paper a new system of measuring  $\sigma_{total}$  according to the  
method of single impulses was worked out.  $\sigma_{total}$  denotes the  
phenomenological coefficient of secondary electron emission  
(abbr. SEE), which is equal to the ratio between the electron-  
current originating from the target, and the current of descending  
primary electrons. This method permits an increase in accuracy  
of measurement up to  $1 + 2\%$ . The coefficients of SEE  $\sigma_m$  (the ratio  
between the sum of currents in the target circuit and the current  
with negative collector potential) and  $\sigma_{total}$  were measured for a  
number of dielectrics. It is shown that the theorem of affinity  
does not hold in this case. The dependence of the coefficients  
 $\sigma_{total}$  and  $\sigma_m$  on the angle for a number of dielectrics was measured.  
It is shown that in several dielectrics  $\sigma_{sec}$  decreases in the range  
Card 1/2  $U_p < U_{p \max}$  with a growing angle of descent, which circumstance